

WHAT IS CLAIMED IS:

1. A network device, comprising:

a public switched telephone network port;

5 a demodulator to demodulate an incoming public switched telephone network

signal stream into a digital data stream;

a processor to

detect a start bit of a TTY data stream within the PSTN signal stream;

perform a verification process on the start bit; and

convert the digital data stream into data packets during the verification

10 process; and

a buffer to store the data packets during the verification process.

2. The method of claim 1, the processor further to direct transmission of data packets not

containing TTY data upon failure of the verification process.

3. The method of claim 1, the processor further to direct discarding of any data packets

15 not containing TTY data upon success of the verification process.

4. The method of claim 1, the network device further comprising an H.323 gateway.

5. A method of transmitting TTY data across a data network, the method comprising:

monitoring an incoming PSTN signal stream for a TTY start bit;

detecting a TTY start indicator;

20 determining if the TTY start bit is valid;

converting the signal stream to data packets while determining if the TTY start bit

is valid; and

storing the data packets.

6. The method of claim 5, the method comprising determining that the TTY start bit is

25 not valid and transmitting the data packets.

7. The method of claim 5, the method comprising determining that the TTY start bit is valid and discarding any data packets not containing TTY data.
8. The method of claim 5, converting the signal stream to data packets further comprising demodulating the TTY signal into a digital data stream and packetizing the digital data stream.
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9. A network device, comprising:
 - a data port to allow reception of data packets containing TTY data;
 - a modulator to modulate the TTY data into PSTN signals; and
 - a port to allow transmission of the PSTN signals to a PSTN line.
10. The network device of claim 9, the device further comprising a processor to extract TTY data from the data packets.
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11. The network device of claim 9, the device further comprising a delay controller to control a built-in delay between the reception of the TTY data to the PSTN signal.
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12. The network device of claim 9, the network device further comprising an H.323 gateway.
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13. A method of receiving TTY data, the method comprising:
 - receiving at least one data packet containing TTY data;
 - modulating the TTY data into PSTN signals; and
 - transmitting the PSTN signals to a PSTN line.
20. 14. The method of claim 13, the method comprising controlling a delay period between receiving at least one data packet and modulating the TTY data to account for network jitter.
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15. The method of claim 13, modulating the TTY data into PSTN signals further comprising:
 - extracting the TTY data from incoming data packets;

converting the TTY data to PSTN signals.

16. A method to validate a TTY signal, the method comprising:

detecting a suspected start bit of a TTY signal; and

parsing subsequent signals to the suspected start bit to determine if the subsequent

5 signals include TTY character data.

17. The method of claim 16, the method comprising determining that the subsequent

signals include TTY character data and packetizing the character data for

transmission.

18. The method of claim 16, the method comprising determining that the subsequent

10 signals do not include TTY character data and transmitting data a stored during the

determining process.

19. A network device, comprising:

a means for receiving public switched telephone network signals;

a means for demodulating the public switched telephone network signals into a

15 digital data stream;

means for detecting a start bit of a TTY data stream within the PSTN signals;

means for performing a verification process on the start bit;

means for converting the digital data stream into data packets during the

verification process; and

20 means for storing the data packets during the verification process.

20. The network device of claim 19 the device comprising means for directing

transmission of data packets not containing TTY data upon failure of the verification

process.

21. The network device of claim 19, the device comprising means for directing discarding

25 of any data packets not containing TTY data upon success of the verification process.

22. A network device, comprising:

means for allowing reception of data packets containing TTY data;

means for modulating the TTY data into PSTN signals; and

means for allowing transmission of the PSTN signals to a PSTN line.

5 23. The network device of claim 22, the device further comprising means for extracting

TTY data from the data packets.

24. The network device of claim 22, the device further comprising a means for controlling
a built-in delay between the reception of the TTY data to the PSTN signal.

25. An article of machine-readable media containing instructions that, when executed

10 cause the machine to:

monitor an incoming PSTN signal stream for a TTY start bit;

detect a TTY start indicator;

determine if the TTY start bit is valid;

convert the signal stream to data packets while determining if the TTY start bit is
valid; and

store the data packets.

26. The article of claim 25 containing instructions that, when executed, cause the machine
to determine that the TTY start bit is not valid and transmitting the data packets.

27. The article of claim 25 containing instructions that, when executed, cause the machine
20 to determine that the TTY start bit is valid and discarding any data packets not
containing TTY data.

28. An article of machine-readable media containing instructions that, when executed
cause the machine to:

receive at least one data packet containing TTY data;

modulate the TTY data into PSTN signals; and

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transmit the PSTN signals to a PSTN line.

29. The article of claim 28 containing instructions that, when executed, cause the machine to control a delay period between receiving at least one data packet and modulating the TTY data to account for network jitter.

5 30. The article of claim 28 the instructions that, when executed, cause the machine to modulate the TTY data into PSTN signals further causes the machine to:
extract the TTY data from incoming data packets; and
convert the TTY data to PSTN signals.

31. An article of machine-readable media containing instructions that, when executed
10 cause the machine to:

detect a suspected start bit of a TTY signal; and
parse subsequent signals to the suspected start bit to determine if the subsequent signals include TTY character data.

32. The article of claim 31 containing instructions that, when executed, cause the machine
15 to determine that the subsequent signals include TTY character data and packetizing the character data for transmission.

33. The article of claim 31 containing instructions that, when executed, cause the machine to determining that the subsequent signals do not include TTY character data and transmitting data a stored during the determining process.